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(54) Title: PANEL LOUDSPEAKER

(54) Bezeichnung: PLATTENLAUTSPRECHER

(57) Abstract

The invention relates to so-called panel loudspeakers (11) working according to the multiresonance principle. Said loudspeakers are generally formed by a core layer (13) and at least one outer layer (14.o, 14.u). The outer layers (14.o, 14.u) are connected to the core layer (13). A periphery is also provided (12) enclosing the panel loudspeaker (11) at a lateral distance (A). The panel loudspeaker is connected to the periphery (12) by means of connecting elements (17, 17'). Although good reproduction results can be obtained in the mid and high audio frequencies with the panel loudspeakers (11) described above, undesired large panel surfaces are known to be required for good low frequency reproduction. When such panel surfaces are not used, the lowest panel resonances ensuring bass reproduction are shifted towards the midfrequencies. Hence, the invention aims at providing a panel loudspeaker (11) exhibiting improved acoustic reproduction in the low frequency range despite a relatively smaller panel surface. According to the invention, this is achieved in that the connecting elements (17, 17') are subjected to mechanical tension when they are connected to the periphery (12) resulting in supplementary particularly low frequency drum resonances in addition to the existing low frequency panel resonances, which can be modulated by the tension in the connecting elements (17, 17').

